

Inventors: Yeaman and Shen  
Serial No.: 09/648,816  
Filed: August 25, 2000  
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### **REMARKS**

Claims 67-79 are pending in the above-identified application. Claims 70-74 and 76-79 stand withdrawn from consideration as directed to a non-elected invention. Claims 67-69 and 75 are presently being examined.

Claim 67 has been amended herein to clarify that the claimed antimicrobial peptide consists of 13 to 74 amino acids. The amendment to claim 67 is supported throughout the specification, for example, at page 42, lines 8-11, and adds no new matter. Applicants respectfully request entry of the amendment.

### **Double Patenting Rejection**

The rejection of claims 69 and 75 under the judicially created doctrine of obviousness-type double patenting as allegedly obvious over claim 1 of copending U.S. Patent No. 6,743,769, is respectfully traversed. Applicants respectfully request that this rejection be held in abeyance until there is an indication of allowable subject matter at which time Applicants will file a Terminal Disclaimer if appropriate.

### **Rejections under 35 U.S.C. § 112, second paragraph**

The rejection of claims 67-79 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, respectfully is traversed. Applicants maintain that claims 67-79 are clear and definite to one possessing the ordinary level of skill in the art in view of the specification.

Applicants maintain out that the U.S. Court of Appeals for the Federal Circuit has indicated in its numerous decisions on the issue that definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular application disclosure,

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(2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. *See, e.g., In re Marosi*, 710 F.2d 799, 218 U.S.P.Q. 289 (Fed. Cir. 1983); *Rosemount, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540, 221 U.S.P.Q. 1 (Fed. Cir. 1984); *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983); and *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 53 U.S.P.Q.2d 1225 (Fed. Cir. 1999) (district court failed to consider the knowledge of one skilled in the art when interpreting the patent disclosure).

With regard to the assertion that the phrase "wherein said antimicrobial peptide consists of an amino acid sequence having 13 to 74 amino acids" is indefinite because the phrase recites both open ("having") and closed ("consists of") language, Applicants respectfully disagree. Nevertheless, Applicants have amended base claim 67 to remove the term "having," thereby obviating this ground for rejection. Accordingly, Applicants respectfully request that the Examiner remove the rejection of claims 67-79 and 75 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

#### **Rejections under 35 U.S.C. § 102**

Applicants respectfully traverse the rejection of claims 67 and 68 under 35 U.S.C. § 102(b), as allegedly anticipated by United States Patent No. 5,409,898, to Darveau et al.

The peptides set forth in the '898 patent differ from the claimed antimicrobial peptides by having non-identical natural amino acid residues at several positions. Natural amino acids do not represent synthetic peptide mimetics of the claimed peptides. Mimetics are "chemical structures derived from bioactive peptides which imitate natural molecules." Goodman and Ro, Exhibit A to Applicants' response filed November 21, 2003, sentence bridging pages 804 and 805). A natural peptide having non-identical natural amino acid residues at several positions compared to the claimed antimicrobial peptide does not represent a synthetic peptide mimetic of an antimicrobial peptide of claims 67-69 and 75. Accordingly, removal of the rejection of claims

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67 and 68 under 35 U.S.C. § 102(b), as allegedly anticipated by United States Patent No. 5,409,898, to Darveau et al. respectfully is requested.

Applicants respectfully traverse the rejection of claims 67-69 and 75 under 35 U.S.C. § 102(b), as allegedly anticipated by Kupsch et al., *EMBO J.*, 12(2): 641-650 (1993). The Office Action alleges that claims 67 and 68 are anticipated by the description in Kupsch et al. of a member of the variable opacity (Opa) outer membrane family of proteins that is designated OPA 65 and has 236 amino acids, including the core sequence ARYRKWK. As set forth above, base claim 67 has been amended herein to clarify that the claimed antimicrobial peptide consists of an amino acid sequence having 13 to 74 amino acids. The Opa 65 peptide has 236 amino acids and, accordingly, does not fall within the scope of claim 67 and cannot anticipate either base claim 67 or dependent claim 68. Accordingly, Applicants respectfully request removal of the rejection of claims 67 and 68 under 35 U.S.C. § 102(b), as allegedly anticipated by Kupsch et al., *EMBO J.*, 12(2): 641-650 (1993).

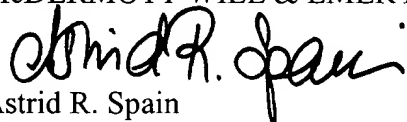
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**CONCLUSION**

In light of the Amendments and Remarks herein, Applicants submit that the claims are now in condition for allowance and respectfully request a notice to this effect. Should the Examiner have any questions, he/she is invited to call the undersigned attorney.

Respectfully submitted,

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